

PATENT

Serial No.: 10/010,850

Group No.: 1765

Page 2

In the Claims

Please amend Claim 1 as set forth in the Complete Listing of Claims below:

Complete Listing of Claims

Claim 1 (currently amended): A method for manufacturing a semiconductor device using a plurality of deposited and patterned layers of polysilicon, an oxide sacrificial material, and [[a]] an exposed metal layer including aluminum comprising the step of etching the oxide sacrificial material by immersing the semiconductor device into an etching solution comprising hydrofluoric acid (HF) and sulfuric acid (H_2SO_4) in a ratio HF: H_2SO_4 ranging from 1:1 to 3:1 while retaining the patterned layers of polysilicon and the exposed metal layer including aluminum.

Claim 2 (cancelled)

Claim 3 (cancelled)

Claim 4 (currently amended): The method of Claim 1 wherein the etching solution has an etch selectivity for the oxide sacrificial material relative to the exposed metal layer including aluminum of greater than 100.

Claim 5 (original): The method of Claim 1 wherein the semiconductor device comprises a micromechanical device, a microelectromechanical device or a microfluidic device.

Claim 6 (original): The method of Claim 1 wherein the step of etching the oxide sacrificial material is performed with the etching solution at a temperature in the range of 5 - 70 °C.

Claim 7 (original): The method of Claim 1 wherein the hydrofluoric acid comprises a "semiconductor grade" hydrofluoric acid, and the sulfuric acid comprises a "semiconductor grade" sulfuric acid.

Claim 8 (original): The method of Claim 1 wherein the hydrofluoric acid comprises at least 40 - 50% by weight HF.

PATENT

Serial No.: 10/ 010,850

Group No.: 1765

Page 3

Claim 9 (original): The method of Claim 1 wherein the sulfuric acid comprises at least 90% by weight H₂SO₄.

Claims 10 - 18 (cancelled)